

can be efficiently accessed through the ILECs' local switching facilities upon which the loop plant terminates. Such a conclusion is not theoretical, but is validated by the state proceedings called for by the *Triennial Review Order*.

In the *Triennial Review Order*, the Commission directed state commissions to pay particular attention to actual marketplace evidence to judge impairment. The Commission reasoned that the "principal mechanism" to judge impairment should be actual marketplace activity,<sup>111</sup> and formulated the "trigger" analysis as a way to examine the existence of "actual competition" in a given market.<sup>112</sup> As the Commission explained, the purpose of the trigger analysis is to consider whether "actual marketplace evidence shows whether new entrants, as a practical matter, have surmounted barriers to entry in the relevant market,"<sup>113</sup> so that "... it is feasible to provide service without relying on the incumbent LEC."<sup>114</sup>

The law of unintended consequences is sometimes an important regulatory tool and one consequence of the "mass market switch triggers" provided for by the *Triennial Review Order* is that the BOCs were provided an incentive to publicly disclose their best measures of mass market competition over CLEC-provided switching facilities (that is, UNE-L). During the

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<sup>111</sup> *Triennial Review Order* ¶ 498.

<sup>112</sup> The *Triennial Review Order* adopted two "mass market switch triggers." One required a state commission to remove a BOC's obligation to offer unbundled local switching under section 251 of the Act if it determined that three qualifying entrants are competing in the mass market (as defined geographically by the state commission) using their own switching. The other required a state commission to remove a BOC's obligation to offer unbundled local switching if it is determined that two or more qualifying entrants are competing in the mass market using their own switching.

<sup>113</sup> *Triennial Review Order* ¶ 99.

<sup>114</sup> *Id.* ¶ 93.

earlier *Triennial Review Order* proceeding, little data was available concerning actual levels of mass market competition using UNE-L.

The state proceedings filled this vacuum and provide the strongest evidence to date *supporting* the Commission's finding of impairment for unbundled mass market local switching; the data voluntarily provided by the BOCs before state commissions conclusively demonstrates that there is *no* meaningful mass market competition using UNE-L, even in those "most competitive" markets where the BOCs claimed that the mass market switch triggers were satisfied. More than eight years after passage of the 1996 Act,<sup>115</sup> significant mass market competition using UNE-L has simply failed to materialize. Indeed, the data from the state proceedings prove beyond question four basic facts:

1. No matter what definition of the geographic market is used – the state, the MSA, the LATA or the wire center – there simply is no significant mass market competition using analog UNE-L.
2. UNE-L CLECs are fundamentally focused on serving the digital (DS1 and higher) – and not the mass – market.
3. Only unbundled local switching affords CLECs the broad footprint needed for POTS competition. The only mechanism that can satisfy Congress's goal and expectation of broad competition for the typical POTS customer – whether residential or small business – is the competition made possible by unbundled local switching.
4. There is no wholesale market for local switching. In the state impairment dockets, the BOCs did not identify a single carrier offering wholesale switching at the analog level.

During the *Triennial Review Order* proceeding, the Commission only had one dimension of data to consider – that is, the physical location of CLEC switches. The state

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<sup>115</sup> It is useful to remember that many states had authorized loop-based entry prior to passage of the 1996 Act. See *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8<sup>th</sup> Cir. 1997).

*Triennial Review Order* proceedings introduced a vital new set of facts: namely, *how* CLECs use their switches. It is beyond the accelerated time-lines of this proceeding to review the record in each state exhaustively, which would be complicated in any instance by the fact that the states did not collect identical sets of data.<sup>116</sup> Nevertheless, an unmistakable *pattern* of competitive activity emerged that is representative of conditions across the country. The Commission cannot abandon its impairment finding without confronting the massive record evidence collected in the state proceedings that validated its earlier analysis and conclusions that there is impairment for mass market local switching.

1. *Finding 1: there is no significant mass market competition using UNE-L*

No matter how you define the market, the data collected in the state *Triennial Review Order* proceedings demonstrate that there is no significant mass market competition today occurring from CLECs using the ILECs' analog unbundled loops in conjunction with competitively-provided switching (*i.e.*, UNE-L service). This fundamental conclusion holds whether the competitive data is evaluated at the state level, or using sequentially smaller measures of individual markets, defined as either an MSA, LATA, or individual wire center.

Table E summarizes the levels of mass market activity in several states where the BOC claimed that the mass market switch triggers were satisfied. As Table E shows, even after more than eight years under the market opening provisions of the 1996 Act, mass market competition using the UNE-L strategy has not materialized.

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<sup>116</sup> In addition, in several states the BOCs never challenged that CLECs were impaired without unbundled local switching and proceedings in other states were terminated after the *USTA II* decision without a full record.

**Table E:**  
**UNE-L Mass Market Share**

State	Share
Alabama	0.4%
Florida	1.4%
Georgia	0.9%
Illinois	1.3%
Indiana	0.8%
Kentucky	0.3%
Michigan	1.2%
Missouri	1.2%
South Carolina	0.5%
Tennessee	0.5%
Texas	0.3%

Significantly, the results in Table E are *not* the consequence of stronger competition in some markets being diluted by the absence of competition in others. Even where the specific cities/markets identified by the ILECs as the “most competitive” areas within their territories are considered, mass market local competition based on UNE-L is *de minimis* by any standard.

Table F analyzes the levels of mass market UNE-L competition filed by the BOCs at a more granular level, evaluating competitive share at the next smaller (than the state level) definition of geographic market, for example, the MSA or LATA. Across a wide spectrum of cities, the data reveal the same fundamental pattern – UNE-L based POTS competition is trivial, consistently less than 1%. In any conventional industry survey, competitive shares at these levels would be dismissed as irrelevant, nothing more than statistical noise from fringe activity.

**Table F: Mass Market Loop Activity by LATA/MSA-Level Market**

Market Area	Mass Market UNE-L Share
Akron, Ohio	0.3%
Austin-Round Rock MSA, Texas	0.2%
Cleveland, Ohio	0.7%
Columbus, Ohio	0.9%
Corpus Christi MSA, Texas	0.2%
Dallas-Fort Worth-Arlington MSA, Texas	0.3%
Dayton, Ohio	0.4%
Houston-Baytown-Sugar Land MSA, Texas	0.2%
Kansas City LATA, Missouri	0.0%
San Antonio MSA, Texas	0.3%
Springfield LATA, Missouri	1.0%
St. Louis LATA, Missouri	0.0%
Toledo, Ohio	0.1%
Westphalia LATA, Missouri	0.0%
Youngstown, Ohio	0.4%

In the BellSouth region, data was available that permitted the analysis of *current* competitive activity, thereby eliminating from the analysis loops that reflect the decaying legacy of failed business plans. By focusing on UNE-L activity over the most recent six month period for which data was available (which, because of the source data, also includes enterprise loops),<sup>117</sup> a more accurate picture of current competitive activity can be developed. This data further confirms the absence of UNE-L based competition, and demonstrates the clear dependency of local competition on unbundled local switching.

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<sup>117</sup> The inclusion of enterprise loop data influences the conclusion drawn here that UNE-L activity is *de minimus*, particularly in comparison to UNE-P. If enterprise loop information were eliminated, the level of UNE-L activity would be even smaller.

**Table G: Current Competitive Activity – UNE-L and UNE-P  
April 2003 to September 2003**

LATA	UNE-P	UNE-L
Asheville - NC	3.7%	0.0%
Atlanta - AL	8.8%	0.0%
Augusta - SC	5.3%	0.0%
Baton Rouge - LA	6.1%	0.1%
Birmingham - AL	6.0%	0.0%
Charleston - SC	4.6%	0.3%
Charlotte - NC	4.5%	0.3%
Charlotte - SC	4.0%	0.0%
Chattanooga - TN	5.7%	0.1%
Columbia - SC	5.5%	0.1%
Daytona Beach - FL	5.9%	0.2%
Florence - SC	6.7%	0.0%
Gainesville - FL	4.3%	0.0%
Greensboro - NC	4.5%	0.4%
Greenville - SC	5.2%	0.1%
Huntsville - TN A	3.1%	0.0%
Huntsville - AL	6.1%	0.0%
Jacksonville - FL	4.5%	0.4%
Knoxville - TN	5.1%	0.0%
Lafayette - LA	6.3%	0.2%
Louisville - KY	7.4%	0.0%
Memphis - TN	5.6%	0.2%
Mobile - AL	8.0%	0.0%
Montgomery - AL	6.8%	0.0%
Nashville - KY	9.5%	0.0%
Nashville - TN	4.5%	0.2%
New Orleans - LA	5.3%	0.0%
Orlando - FL	4.5%	0.5%
Owensboro - KY	8.6%	0.0%
Panama City - FL	3.0%	0.0%
Pensacola - AL	8.8%	0.0%
Pensacola - FL	5.6%	0.0%
Raleigh - NC	4.1%	0.5%
Shreveport - LA	6.1%	0.3%
Southeast Florida - FL	6.8%	0.6%
VA Knoxville - TN	2.8%	0.0%
Wilmington – NC	4.0%	0.3%
Winchester – TN	4.5%	0.0%

The pattern of competitive activity in Table G could not be more clear. There is no significant UNE-L based competition, while the competitive activity made possible through the use of unbundled local switching to access the legacy analog network is widespread.

This clear pattern is equally true even when the smallest possible market definition – the individual wire center – is used. To demonstrate this pattern, wire center-level summaries for Texas, Indiana, and Illinois have been scrubbed of confidential information. Exhibit 10 (attached) shows the competitive carrier's penetration of each claimed mass market switch trigger candidate, by wire center, in each of the Texas MSAs where SBC claimed the mass market switch trigger was satisfied, with the wire centers ranked from largest (at the top) to smallest (at the bottom) according to the number of retail access lines in the office. As Exhibit 11 (attached) shows, SBC's so-called mass market switch trigger candidates have not achieved any significant share in any wire center, and serve no lines in the vast majority of offices in the area. These results simply are not consistent with the entry pattern of a carrier competing in the mass market.

Results for Indianapolis, Exhibit 12 (attached), and Chicago, Exhibit 11 (attached), reveal the same pattern.<sup>118</sup> Although there may be some analog loops being leased by CLECs in these cities, the pattern of entry is not consistent with a viable mass market competitor. Rather, the trivial levels of activity are consistent only with incidental analog activity to enterprise services, or legacy evidence of an abandoned business plan. These conclusions are further supported by the time-series and carrier-specific data from the state proceedings

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<sup>118</sup> Although the wire centers in Exhibit 12 (Indianapolis) are ranked from largest to smallest (by number of retail access lines) in a same manner as Exhibit 10 (Texas), the wire centers in Exhibit 11 (Chicago) are listed alphabetically (conforming to the organization used in the original state proceedings).

explained below, which demonstrate that analog activity is decaying and the named trigger candidates are clearly enterprise CLECs with incidental analog activity.

2.     *Finding 2: analog activity is declining and is incidental to enterprise-oriented business plans.*

The Commission cannot accelerate the deployment and use of digital technology by forcing analog customers to abandon UNE-P based services. Eliminating local switching as a section 251(c)(3) UNE (and thereby eliminating UNE-P) would merely condemn analog customers to a monopoly future. Nor can the Commission pretend that the analog operations of enterprise carriers signify the existence of mass market competition. The fact is that there are a variety of business reasons for enterprise CLECs to provide a limited amount of analog services as part of their *enterprise* business plan. The reason the BOCs are unable to show meaningful mass market competition using UNE-L is that UNE-L CLECs are fundamentally focused on serving the enterprise market by serving customers that *already* demand high-speed digital services, and in accomplishing the task of shifting the analog-digital (which is to say mass-market/enterprise) divide down as deep into the market as time, technology and customer preference permit.

To begin, while the focus of the enterprise CLEC is on the business customer who desires integrated voice and data services over a digital high-speed connection, customers are not perfectly digital. For a wide range of reasons, an enterprise customer may require an analog connection – for satellite offices, for fax machines, or for incremental phones – that cannot justify an additional high-speed connection. As a result, many CLECs serving enterprise customers may service some analog loops. The data demonstrates, however, that such analog



activity is declining and that the predominant economic activity of those CLECs named as mass market switch triggers is to serve the enterprise market.

First, aggregate statewide data clearly establishes the fact that analog loops are declining while digital loops increase. This pattern is consistent across all states analyzed.

**Table H: Analyzing Growth Rates by  
UNE-L Loop Type**

State	Analog	Digital
Illinois <sup>119</sup>	-6%	49%
Indiana <sup>120</sup>	-13%	129%
Kentucky <sup>121</sup>	-52%	91%
South Carolina <sup>122</sup>	-21%	78%
Tennessee <sup>123</sup>	-20%	89%

Data from North Carolina for the period ending in June 2004, demonstrates that the trend continues, emphasizing the particular importance of DS1 loop/transport (*i.e.*, EELs) combinations to local competition.

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<sup>119</sup> See ICC Docket No. 03-0595, CLEC Coalition Exhibit JPG 2.0 (Gillan), at 15 (filed Feb. 24, 2004). Time period supplied by SBC was March – December 2003. Attached hereto as Exhibit 13.

<sup>120</sup> See Indiana Cause No. 42500 Phase II, Rebuttal Testimony of Joseph Gillan, at 54 (filed Apr. 2, 2004). Time period supplied by SBC was January – December 2003. Attached hereto as Exhibit 14.

<sup>121</sup> See Kentucky Case No. 2003-00379, Rebuttal Testimony of Joseph Gillan, at 28 (filed Mar. 31, 2004). Time period of analysis is May 2003 – September 2003. Attached hereto as Exhibit 15.

<sup>122</sup> See South Carolina Docket 2003-326-C, Rebuttal Testimony of Joseph Gillan, at 36 (Mar. 12, 2004). Time period of analysis is November 2002 – November 2003. Attached hereto as Exhibit 16.

<sup>123</sup> See Tennessee Docket No. 03-00491, Surrebuttal Testimony of Joseph Gillan, at 21 (Mar. 1, 2004). Time period of analysis in May 2003 – September 2003. Attached hereto as Exhibit 17.

**Table I: UNE-L Activity (North Carolina)<sup>124</sup>**

Type of UNE-L	Change
Analog	-14%
DS1	66%
DS1 EEL (Loop + Transport)	169%

By analyzing the type of loops CLECs purchase, the Commission can conduct the granular analysis required by *USTA I*. Merely viewing UNE-L activity – without analysis of the *types* of loops being leased by UNE-L CLECs – does not consider the market-specific factors that identify the customer segments being served. As a result, any analysis that solely focuses on UNE-L volumes, without further analyzing the pattern of UNE-L activity (*i.e.*, distinguishing between the purchase of analog mass market loops and high-speed digital loops) does not give an accurate picture of the level of mass market local competition and would not comply with the requirements of *USTA I*.

In a number of states, data was available to conduct an even more granular analysis by reviewing loop leasing patterns for the individual CLECs claimed as mass market switch triggers by the BOC. Table J analyzes the *current* UNE-L activity (by loop type) by the claimed mass market switch triggers in Illinois, Michigan, and Texas.<sup>125</sup> As Table J shows, the pattern of activity is *not* consistent with carriers offering mass market POTS services, with double digit declines in analog loops and double digit increases in DS1 loops.

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<sup>124</sup> See North Carolina Docket No. P-55, Sub 1013 (BellSouth Application for Price Regulation), Direct Testimony of Joseph Gillan (Sept. 20, 2004). Data analyzed was for the period June 2002 - June 2004. Attached hereto as Exhibit 18.

<sup>125</sup> These are the three states for which this information was available.

**Table J: The Pattern of Competition by Claimed Triggers  
Type of Loop Leased During 2003**

Claimed Trigger <sup>126</sup>	Analog Loop Growth Rate			DSL Loop Growth Rate		
	Illinois <sup>127</sup>	Michigan <sup>128</sup>	Texas <sup>129</sup>	Illinois	Michigan	Texas
Trigger A	-10%	-14%	-17%	26%	2,100%	20%
Trigger B	6%	-19%	-7%	10,250%	182%	0%
Trigger C	-7%	-2%	-34%	445%	32%	209%
Trigger D	-19%	-30%	-10%	39%	-15%	1%
Trigger E	-12%	-9%	-28%	0%	73%	-4%
Trigger F	12%	-6%	34%	170%	74%	7%
Trigger G	-7%	-12%	-17%	0%	315%	None
Trigger H	83%	19%	11%	508%	291%	0%
Trigger I		-27%	-3%		-3%	17%
Trigger J		-3%	-29%		136%	64%

Moreover, the pattern above does not signify a recent change in CLEC behavior.

The fact that competitive carriers are focused on the enterprise market was well documented in the record of the *Triennial Review Order* docket and formed an important – and undisputed – component of the Commission’s decision in the *Triennial Review Order*. The Commission fully recognized that enterprise switches – which is to say, enterprise CLECs – would serve analog lines without the existence of such analog lines changing the fundamental nature of their business. As the Commission concluded:

<sup>126</sup> The name of the claimed trigger candidate in the chart is masked to protect confidentiality. Because the point demonstrated by the Table is the overall pattern, the Table is not structured to assure that “Trigger A” is the same carrier in different states. That is, the carrier labeled “Trigger A” is the same in both columns labeled Illinois, but may (or may not) be the same carrier in Michigan as it is in Illinois.

<sup>127</sup> See Exhibit 13. Data is for March 2003 to December 2003.

<sup>128</sup> See Michigan Case No. U-13796, Surrebuttal Testimony of Joseph Gillan, at 9 (Mar. 5, 2004). Attached hereto as Exhibit 19.

<sup>129</sup> See SBC Response to CLEC Data Request 1-12, Exhibit 2.8 (CLEC Coalition) in Docket No. 28607.

the fact remains that competitors using their own switches are currently serving extremely few mass market customers, through enterprise switches or otherwise.<sup>130</sup>

The state proceedings validated the Commission's findings in the *Triennial Review Order* by developing a broad and unambiguous record basis for the Commission's conclusion that there are fundamental differences between the mass market and the enterprise market.<sup>131</sup> The Commission understood that enterprise switches likely would have some analog activity, but that at bottom CLEC competition (without unbundled local switching) was focused on the enterprise market.<sup>132</sup>

By analyzing the relative levels of analog and digital activity over the wide range of claimed mass market switch trigger candidates for which state data was available, Exhibit 20 (attached) confirms this finding. As Exhibit 20 shows, the CLECs named by the BOCs as their "best evidence" of mass market competition are, in fact, enterprise CLECs with tangential analog

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<sup>130</sup> *Triennial Review Order* ¶ 441.

<sup>131</sup> The Commission was clear that "switches serving the enterprise market do not qualify for the triggers." *Id.* ¶ 508.

<sup>132</sup> As the Commission explained:

Incumbent LECs claim that the Commission should remove virtually all unbundling obligations regarding local switching on a national basis simply because competitive carriers have deployed 1,300 switches and are serving, according to the BOC UNE Fact Report 2002, over 16 million lines with those switches. This argument, however, ignores significant differences in the evidence concerning the enterprise market and mass market. The record is replete with evidence showing that competitive LECs are successfully using their own switches to serve large business customers that require high-capacity loops (which can be connected to competitive carrier switches with few of the obstacles that affect voice-grade loops). For example, BiznessOnline.Com cites data compiled by a coalition of competitive carriers which examined six representative markets and found that approximately 90 percent of the loops used by competitive carriers in these markets are DS1 capacity or higher loops. *Id.* ¶ 437.

activity. The data simply does not support the BOCs' allegation that actual marketplace evidence shows that CLECs are not impaired without access to unbundled local switching.

3. *Finding 3: Only UNE-P demonstrates a competitive profile consistent with mass market competition.*

The record data collected in the state proceedings demonstrated *without exception* that only competition utilizing unbundled local switching was able to produce a competitive profile consistent with mass market competition. The defining feature of the mass market is that it requires *mass* for competition to succeed. No individual mass market customer is particularly large or exceptionally profitable to serve. As a result, competitors must be able to address a large base of potential mass market customers in order to build a base of any size. In addition, the residential and analog business customers that comprise the mass market are themselves geographically dispersed throughout an area – in neighborhoods, strip malls and small towns. In order to succeed in the mass market, therefore, a CLEC must have the ability to offer service across this broad footprint, in part because it cannot expect to gain a large share of the market in any narrowly defined geographic area.

Exhibit 21 (attached) provides a number of state-by-state – and, in some instances, market-by-market – analyses that compare the competitive profile of UNE-P in contrast to that achieved by UNE-L. Because data was not consistently produced in every state, there are some differences in precisely what (and for what time period) the comparison could be performed, but this variation serves only to underscore just how consistent the comparative profiles are around the country. In all instances, the competitive profiles compare the competitive penetration of UNE-P to UNE-L by wire center, with the largest (measured in access lines) wire centers on the left and the smallest wire centers on the right.

The first competitive profile is presented for Alabama (Page 1 of Exhibit 21). As with most of the profiles for BellSouth states, the Alabama profile compares recent competitive activity for UNE-P and UNE-L.<sup>133</sup> As this profile shows, UNE-P is producing competition throughout the entire state of Alabama irrespective of wire center size, while UNE-L activity is limited to only the largest wire centers. This basic conclusion applies throughout Exhibit 21 – UNE-P activity is broad and nondiscriminatory, while UNE-L activity is small and geographically limited.

4. *Finding 4: There are no wholesale providers of switching for analog service.*

As part of the “switch trigger” analysis, the Commission permitted the BOCs to remove local switching as a UNE in a market where two wholesale providers operated.<sup>134</sup> In addition, a wholesale provider could have been proffered to count towards the retail switch trigger.<sup>135</sup> Significantly, the Joint Commenters are unaware of the BOCs naming a *single* wholesale provider of analog switching in any market.<sup>136</sup> This confirms the Joint Commenters’

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<sup>133</sup> As noted, the data available for analysis differs among jurisdictions. The competitive profile for Chicago (Page 5 of Exhibit 21), for instance, is focused on the Chicago MSA and compares UNE-P to UNE-L activity of the claimed trigger candidates. Other comparisons focus on particular markets where triggers were claimed to be satisfied, or used only UNE-L loops that the BOC had identified as mass market because that was the UNE-L data available in the proceeding. Despite these small differences in the underlying data, however, the competitive pattern is always the same.

<sup>134</sup> *Triennial Review Order* ¶ 504.

<sup>135</sup> *Id.* ¶ 508.

<sup>136</sup> It appears that the only “intercarrier” contract for analog-level switching is an agreement between Comcast and AT&T in certain markets. Public testimony indicates that one condition of Comcast’s acquisition of AT&T Broadband’s cable properties (and, as a result, its cable telephony subscribers) was that AT&T would retain ownership of the local circuit switches and continue to provide the underlying network service to the transferred subscribers. This unique arrangement is not evidence of a wholesale market,

analysis of the marketplace, in which the impairments that have prevented carriers from using their own switches to serve analog customers have also prevented a wholesale market from developing.

The absence of a wholesale mass market local switching market is an important observation. There is little question that excess local switching capacity exists in many markets. The BOCs have been reporting a general decline in switched access lines as customers migrate to digital services and eliminate second lines in favor of DSL and other internet options. It would be reasonable to expect that switch owners would have strong incentives to offer wholesale options to boost revenues and network utilization but for two limiting factors.

First, with respect to CLEC switches, the same operational and economic barriers that prevent the switch owner from offering mass market services itself also prevent it from providing a commercially-viable option for others to use its switch in this way. Second, with respect to the ILEC, so long as it can reasonably expect that most mass market subscribers would return to it as retail customers, it has no incentive to open its network as a wholesaler.<sup>137</sup> Consequently, the absence of a wholesale market is strong evidence of impairment, for if impairment did not exist, both the entrant *and* the ILEC would have strong incentives of offer wholesale options.

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as the service is available solely to Comcast as a historical byproduct of AT&T's effort to offer phone service over cable facilities. The fact that Comcast did not agree to absorb AT&T's investment in circuit switching is consistent with the cable industry's general distaste for older technology.

<sup>137</sup> Indeed, the BOCs already have begun to advise Wall Street that they expect (should the Commission eliminate UNE-P) to have most of their UNE lines return as retail lines. As BellSouth's CFO puts it: "[a]t the end of the day, I think we'll get the bulk of those customers back." See Exhibit 9.

**E. The Commission Should Not Artificially Truncate The POTS Market Based On The Number Of Analog Lines Purchased By A Customer.**

In the *Triennial Review Order*, the Commission defined mass market customers as “analog voice customers that purchase only a limited number of POTS lines, and can only be economically served via DS0 loops.”<sup>138</sup> Further, the Commission noted that at “some point, customers taking a sufficient number of multiple DS0 loops could be served in a manner similar to that described [...] for enterprise customers – that is, voice services provided over one or several DS1s, including the same variety and quality of services and customer care that enterprise customers receive.”<sup>139</sup> Thus, while the Commission recognized that there *may* be an upper limit to the POTS market, it left it to the states to determine the appropriate crossover (or cut off) point between the POTS market and the enterprise market by determining when a POTS customer has so many analog voice lines that it would be more “efficient” to serve that customer using a DS1 facility.<sup>140</sup>

As discussed herein, evidence presented in the state records – by both ILECs and CLECs – supports a finding that all analog lines are POTS (or mass) market lines, regardless of the number of analog lines a customer purchases. A market-based approach would recognize that the customer is in the best position to decide whether a DS1 based service is appropriate, and the Commission should not artificially limit the customer’s choice by defining the customer as an enterprise customer when what the customer wants is traditional analog voice service. If the

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<sup>138</sup> *Triennial Review Order* ¶ 497.

<sup>139</sup> *Id.*

<sup>140</sup> As discussed herein, a customer’s actual decision to choose a DS1 product over multiple voice lines can be influenced by a number of factors, including reduced reliability and whether the customer is willing to grant its service provider the access to its premises needed to support DS1 services.



Commission, however, determines that it must adopt a specific crossover number, then evidence in the state records repeatedly demonstrates that a crossover of 12 lines, well in excess of the three line crossover that the Commission arbitrarily set in the *UNE Remand Order*, is justified.

1. *Analog voice customers are part of the POTS market irrespective of the number of analog lines they purchase.*

Consistent with the record provided in the state proceedings, the Commission should define any customer served by one or more analog lines as a mass market customer. In other words, if the customer purchases an analog line, and not a high capacity line, then the customer should be treated as a mass market customer for purposes of the Commission's rules – regardless of the number of analog lines the customer purchases or whether the customer is a residential or a business subscriber. Indeed, in state impairment proceedings held in response to the Commission's *Triennial Review Order*, one BOC – Verizon – advocated this approach, arguing in state after state that the crossover point between the mass market and enterprise customers should be determined by whether the customer is served by an analog or a digital loop.<sup>141</sup> As Verizon explained:

At its simplest, this “cutoff” should be between customers actually being served with one or more voice grade DS0 circuits and customers actually being served by DS1 loops... This objective test is more reliable, and grounded in the realities of the marketplace, than an arbitrary “cutoff” at a particular number of lines regardless of whether customer is actually being served as a DS1 customer.<sup>142</sup>

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<sup>141</sup> See, e.g., Direct Testimony of Debra M. Berry and Carlo Michael Peduto, II, on behalf of Verizon Pennsylvania Inc., Pennsylvania Public Utility Commission Docket No. I-00030099 at 17 (Oct. 31, 2003) (stating that the cutoff “should be between customers actually being served with one or more voice grade DS0 circuits and customers actually being served by DS1 loops”). Attached hereto as Exhibit 22.

<sup>142</sup> See *id.*

The Joint Commenters agree with Verizon that there is no need for the regulator to step in and determine an arbitrary crossover point. The customer, not the ILEC or any regulator, is in the best position to determine whether it is a mass market customer or an enterprise customer.

The crossover that the Commission describes in the *Triennial Review Order* is a governmentally drawn upper boundary to the mass market that, in effect, substitutes the Commission's judgment of how a customer *should be served* (via a DS1) for the customer's judgment of how it *has chosen to be served* (for example, through multiple analog lines). Customers above the crossover are deemed enterprise customers solely by virtue of the number of voice lines they purchase, even if they choose to continue to purchase analog lines. The Commission should not institute an arbitrary distinction, but instead should permit the customer, who is in the best position to determine the type of service that he or she needs, to determine whether he or she should be considered part of the mass market. Accordingly, the Commission should conclude that the mass market and the enterprise market are to be defined in terms of the service choice of the customer.<sup>143</sup>

Higher capacity DS1 services are not appropriate for all types of customers, including customers with multiple lines. In order to be served by high capacity services, customers must obtain additional equipment. As a practical matter, customers are not likely to purchase a DS1 service unless they are being served by a PBX that supports a digital interface.

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In its testimony throughout its region, Verizon suggests that the CLEC decides what the customer should purchase. In reality, the CLECs offer various products designed for different customer interfaces (such as analog phone service or a DS1 to a PBX) and the customer, not the CLEC, decides whether it wants to be an enterprise customer or part of the mass market.

In this situation, it is the customer that chooses to become an enterprise customer by the customer premise equipment that it selects.

Not all customers want to be part of the enterprise market even if it would mean cost savings. Looking at the point where it becomes economic to serve a customer using a DS1 instead of DS0s is an oversimplification of the issue. The real life consumer is distinct from the consumer that the Commission contemplates in the *Triennial Review Order*. In the *Triennial Review Order*, the Commission assumes that at some point it becomes more cost effective to serve the customer using DS1 instead of analog lines, and, at that point, the customer would want DS1 service.<sup>144</sup> The Commission's assumption, however, ignores both the factor of additional equipment and the customer's preference. In the *Triennial Review Order*, the Commission assumes that a customer might be served by a DS1 even though the customer does not have a PBX on its premises.<sup>145</sup> For this customer, a DS1 based service would require that it make space available for channel bank equipment on its premises. Customers may not want to devote space on their premises for the equipment, or they may resist the telecommunications provider's need to have access to the premises to maintain and repair the equipment.

There are additional reasons that make DS1 service less attractive to certain customers. Because of provisioning problems (for example, no facilities) and the customer's individual traffic patterns, the CLEC might be forced to use higher priced special access (and thus higher costs to the customer) rather than UNE DS1 facilities to serve the customer, which would significantly reduce the economic attractiveness of a DS1 service to the customer. In

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<sup>144</sup> *Triennial Review Order* ¶ 497.

<sup>145</sup> *Id.*

those circumstances, the customer would have legitimate reasons to preserve its analog POTS service, even if it were at or above the point at which a DS1 theoretically would be less expensive. In addition, a customer served by multiple analog lines is less vulnerable to a total loss of service than a customer whose entire service is being provisioned over a single DS1. Analog voice lines continue to work during power outages, while DS1 based services do not without costly back-up power supplies that provide service only for limited periods.

2. *If the Commission believes that it is necessary to adopt a specific line count, then it should adopt a crossover of 12 lines.*

If the Commission determines that it must adopt a specific line count as the crossover between the mass market and the enterprise market, then it should adopt a crossover of 12 lines. That is, CLECs should be able to lease unbundled local switching to serve customers with up to 12 loops at a single location.

As an initial matter, the Commission has no record basis for adopting a crossover of three lines. The three line crossover is a legacy of the Commission's *UNE Remand Order*, where even the Commission recognized that it had no record support for this determination.<sup>146</sup> Indeed, the Commission acknowledged that "[n]o party in this proceeding, [has identified] the characteristics that distinguish medium and large business customers from the mass market."<sup>147</sup> In the *Triennial Review Order*, the Commission still did not provide any support for a three line crossover, instead permitting states to determine the appropriate crossover point.

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<sup>146</sup> *Id.*

<sup>147</sup> *UNE Remand Order* ¶ 291.

The basic form of the “regulatory crossover” is to estimate “the point where it makes economic sense for a multi-line customer to be served via a DS1 loop.”<sup>148</sup> In simple terms, this means determining when the cost of a UNE DS1 (including non-recurring activities and the installation of customer premises equipment necessary to use DS1 level service) is less than the cost of continued use of multiple UNE analog loops for voice service.

In the state proceedings, two basic – but very similar – methodologies were used to estimate the crossover. Sprint – a large ILEC that also is a competitive provider – sponsored one methodology (first in Florida), which several CLECs supported.<sup>149</sup> Sprint’s simplified methodology calculated the cost to substitute a UNE DS1 for multiple UNE analog lines. A second methodology, developed by AT&T, recognized the additional costs to serve the customer using a DS1 with the CLEC’s switch, compared to the cost of using analog loops in combination with unbundled local switching leased from the incumbent. The principal difference between the approaches was that the Sprint methodology compared only loop costs, including the cost of customer terminal equipment necessary to use a DS1 loop, while the AT&T methodology compared the cost of complete network configurations (UNE-L versus UNE-P), which therefore also included collocation and backhaul costs.<sup>150</sup> The AT&T methodology is more complete –

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<sup>148</sup> *Triennial Review Order* ¶ 497.

<sup>149</sup> Direct Testimony of Kent W. Dickerson, Florida Public Service Commission, Docket No. 030851-TP (Dec. 4, 2003). Attached hereto as Exhibit 23.

<sup>150</sup> The AT&T methodology more closely tracks the specific language of the Commission’s crossover rule which calls for a comparison between two complete network configurations, UNE-L and UNE-P.

Multi-line DS0 end users. As part of the economic analysis set forth in paragraph (d)(2)(iii)(B)(3) of this section, the state commission shall establish a maximum number of DS0 loops for each geographic market that requesting telecommunications carriers *can serve through unbundled switching* [i.e., UNE-P]

... Continued

and therefore more accurate – than the Sprint methodology, whose principal advantage was its simplicity.

Despite their differences, the AT&T and Sprint methodologies produced a consistent and narrow range of crossover estimates. Exhibit 24 (attached) lists the estimated crossovers in each of the states where an analog-to-digital crossover analysis was conducted.<sup>151</sup> As Exhibit 24 shows, these cost-based crossovers (as one would expect) fall within a relatively narrow range. When all states are considered, the average crossover (rounded) is 12, with a standard deviation of 3 lines. Eliminating the highest and the lowest estimated crossovers (Georgia at 9 and the District of Columbia at 21), the average remains at 12, while the standard deviation falls to 1 line. In other words, the states may vary, but the answer does not. If the Commission decides to truncate the upper bound of the POTS market by setting a “maximum analog line count” for an individual customer location, then the evidence from the state records indicates that the line count should be 12.

The Joint Commenters note that before the *USTA II* decision caused the states to suspend their fact-finding, one state had applied the economic analysis discussed in the *Triennial Review Order* to determine the appropriate crossover. Specifically, after reviewing the evidence in the record, the Missouri Public Service Commission (“Missouri PSC”) adopted a crossover of

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... and the point at which multiline end users could be served in an economic fashion by *higher capacity loops and a carrier’s own switching* [i.e., UNE-L] and thus be considered part of the DS1 enterprise market.

47 C.F.R. § 51.319(d)(2)(iii)(b)(4) (*emphasis added*).

<sup>151</sup> Exhibit 24 is complete to the best of our knowledge. The Joint Commenters, however, do not offer service in every state in the nation and, as such, did not participate in each state’s *Triennial Review Order* proceeding. The Joint Commenters have identified and reviewed the majority of state records.

ten lines with customers served with ten or fewer DS0 loops at a particular location classified as mass market customers, and customers with eleven or more DS0 loops at a particular location should be classified as enterprise customers.<sup>152</sup> In reaching this conclusion, the Missouri PSC rejected SBC's argument that the Missouri PSC should employ a three line crossover, stating that Sprint was the only carrier that "presented a credible analysis" regarding the economic point at which it makes sense for a customer to be served by a DS1 loop.<sup>153</sup>

In summary, the Commission did not provide any support – either in the *UNE Remand Order* or in the *Triennial Review Order* – in support of a three line crossover. As the evidence in the state proceeding demonstrates, there is no basis for a three line crossover, as the crossover point is substantially higher. The Commission should find that the customer is in the best position to determine whether it is part of the mass market, and conclude that any customer served by an analog line is a mass market customer. If the Commission, however, concludes that it must adopt a specific crossover level (despite the advocacy of Verizon that there should be no limit), then it should establish a crossover at 12 lines. We also note that a *statewide* crossover set at 12 lines would substantially reduce the addressable business market when compared to the Commission's earlier (but factually unsupported) three line crossover that applied only in zone one offices in the nation's top 50 MSAs. Based on data that the BOCs supplied when they initially designated which wire centers would be considered "zone 1 wire centers" for purposes of special access pricing flexibility, we estimate that no more than 40% of the business lines

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<sup>152</sup> *Commission Inquiry into the Possibility of Impairment without Unbundled Local Circuit Switching when Serving the Mass Market*, Missouri Case No. TO-2004-0207, Order Establishing Geographic Markets and Enterprise Cut Off (Feb. 24, 2004). Attached hereto as Exhibit 25.

<sup>153</sup> *See id.* at 5.

reside in areas that had been potentially subject to the “three line crossover.”<sup>154</sup> Thus, while the percentage of business lines subject to a fact-based crossover (12 lines) may be more than the arbitrary three line rule, the much broader geographic application of the 12 line crossover (statewide as opposed to only zone one offices in the top 50 MSAs) means that more lines will be subject to the 12 line crossover we recommend here than the Commission’s prior rule. Specifically, we estimate a 75% *increase* in the number of business lines subject to a statewide 12 line crossover compared to the existing three line rule.<sup>155</sup>

**F. The Presence Of One Or More Intermodal Providers Does Not Justify Elimination Of Access To The ILEC’s Switch.**

Even if POTS service providers and intermodal service providers did serve the same class of customers, and even if those services could fairly be concluded to be comparable in “cost, quality and maturity” to POTS services and even if these factors were relevant to the impairment analysis, intermodal competition is not enough to justify removal of ILEC unbundling obligations. Congress did not intend to accomplish a competitive market exclusively through intermodal competition, but intended to foster wireline-based local competition.<sup>156</sup>

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<sup>154</sup> See Letter from Genevieve Morelli to Magalie Roman Salas, CC Docket 96-98 (Apr. 27, 2001). The Commission’s earlier rule does not necessarily apply in any MSA because of preconditions that the ILEC was required to fulfill.

<sup>155</sup> Based on the Ameritech *ex parte* that the Commission relied upon when it adopted the three line rule (Sept. 3, 1999 in CC Docket No. 96-98), the Joint Commenters estimate that 79% of business lines are at locations with more than 3 lines, while 55% of business lines are at locations with more than 12 lines. However, because the 12 line crossover applies everywhere, while the three line rule applied in wire centers containing only 40% of the business lines, the three line restriction eliminated only 32% of the business market (*i.e.*, 40% of the 79%), while the 12 line crossover eliminates 55% of the business market (*i.e.*, 100% of the 55%), 75% more lines than the three line rule.

<sup>156</sup> See, *e.g.*, *Local Competition Order* ¶ 3 (citing opening of the ILEC’s networks, competition in the local exchange, access exchange and long distance service markets).



It would be implausible to conclude that Congress intended “competition” to mean the presence of one cable provider, one wireless provider and one POTS provider (*i.e.*, the incumbent wireline service provider) in the defined market. The presence of one or possibly two intermodal providers is not a substitute for the competition created by opening the ILEC’s network and is not the competition that Congress intended. The Commission must retain the current unbundling regime and continue access to the ILEC’s switch in order for wireline POTS competition to continue.

1. *Intermodal competition from cable telephony cannot disprove impairment for switching in the POTS market.*

Although the cable television industry has begun to expand its competitive offerings to include residential and business telephone services delivered over its cable infrastructure,<sup>157</sup> cable facilities do not serve the same critical functions as the ILEC’s loops for reaching the subscriber. Cable telephony’s strategy is to bypass the ILEC’s network entirely,<sup>158</sup> exploiting the benefits of years of last mile facility deployment and near monopoly status in the cable market to roll out telephony services. The first-mover advantages gained through years of providing traditional cable television service give cable providers an ILEC-like presence in a given market. CLECs have no access rights to the cable provider’s infrastructure or facilities or any ability to access end users using the cable provider’s last mile facilities. The Commission never has applied unbundling requirements on cable service providers. Unbundling obligations

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<sup>157</sup> See Elaine Smiles, *Cable Telephony Today*, INTERNET TELEPHONY (May 2004) available at [www.tmcnet.com/it/0504/specialfocus.htm](http://www.tmcnet.com/it/0504/specialfocus.htm). Attached hereto as Exhibit 26.

<sup>158</sup> *Triennial Review Order* ¶ 440.